Seven Facts You Should Know BEFORE Reading this Guide

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Implementing IT is difficult.

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Planning and installing IT is different than other projects.

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IT planning and implementation is not a one-time activity.

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IT must support the strategic business mission, goals and objectives of the law enforcement agency.

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All projects require a plan.

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Successful IT implementation can happen!

Seven Facts You Should Know BEFORE Reading this Guide

Information System: A purposefully designed system that brings data, computers, procedures and people together in order to manage the information that is important to an organization's mission.

— *Webster's New World Dictionary of Computer Terms*, Seventh Edition

Automated **information systems** are a critical component of effective policing. Immediate access to information benefits virtually all levels of the criminal justice system. It means arming patrol officers with real-time information about people, places and criminal incidents. It means providing jailers with immediate access to an inmate's criminal record, religious preference and gang affiliation. It means providing Chiefs and Sheriffs with access to crime statistics at a moment's notice. Simply put, information systems arm everyone from cadets to Chiefs with tools to make better decisions. And that can mean only one thing: *improved officer and public safety*.

But getting there isn't going to be easy. There are some things you should know *before* you undertake an information technology (IT) project. After reading these seven facts, share them with all of the individuals who will be involved in your project.

Fact #1

Implementing IT is difficult.

While the benefits to automation are numerous, planning and implementing IT is a major undertaking that is not always met with success. In fact, consider what the Standish Group found in a study of over 8,000 public and private IT projects:

Source: *The CHAOS Report* (1994), **www.pm2go.com**.

IT initiatives are difficult because:

- They are big projects that often take more than several years and several budget cycles to complete.
- They often cross lines of authority.
- They deal with technology AND with aligning technology to an agency's specific business processes.
- They are time-sensitive.

There are many issues that challenge successful IT implementation. That's why there is such a detailed process for doing it right. We can't list the multitude of things that could go wrong on any given day in any particular project, but we will warn you of the biggies, the sure-fire clues that indicate an IT project is endangered.

IT projects are particularly in jeopardy when:

- IT is considered a technology issue to be handled by technical staff only, rather than a business issue with technical solutions.
- Users and upper management fail to understand how IT can enable law enforcement agencies to meet their business mission. It makes it difficult, then, to create a strategic vision for IT in the agency.
- Upper management and/or end users are not involved in the IT planning, purchasing and/or implementation processes.
- Users do not see the benefit of IT or how it makes their jobs easier and better.
- Project management best practices are not followed in the planning and implementation of the project.
- Budgets do not fund or agencies are not authorized to hire (or outsource) dedicated IT staff and skilled project managers.
- Funding streams exist that:
  - — have such tight timeframes that they don't allow for effective planning;
  - — fund the purchase of technology only, and not critical planning; and
  - — provide one-time funding for IT, and fail to provide ongoing support.
- Failure to follow systems development lifecycle principles (more information on that later) that include long-term and continuous maintenance, planning, enhancement and budgeting for technology.
- Allowing the mere availability of technology to drive the decision to automate, rather than the business needs of the agency driving the decision.

Fact #2

Planning and installing IT is different than other projects.

Procuring technology is different than, say, purchasing office furniture. Okay, this may seem to be an obvious statement, but you may be surprised to learn that many agencies (and maybe yours has been one of them) do not put much more effort into IT procurement than buying a new desk, for example. The catalog comes, the furniture looks great, the vendor promises complete satisfaction and that the piece is top-of-the-line and state-of-the-art. It's also, they promise, made for any law enforcement agency. So you buy it. Case closed.

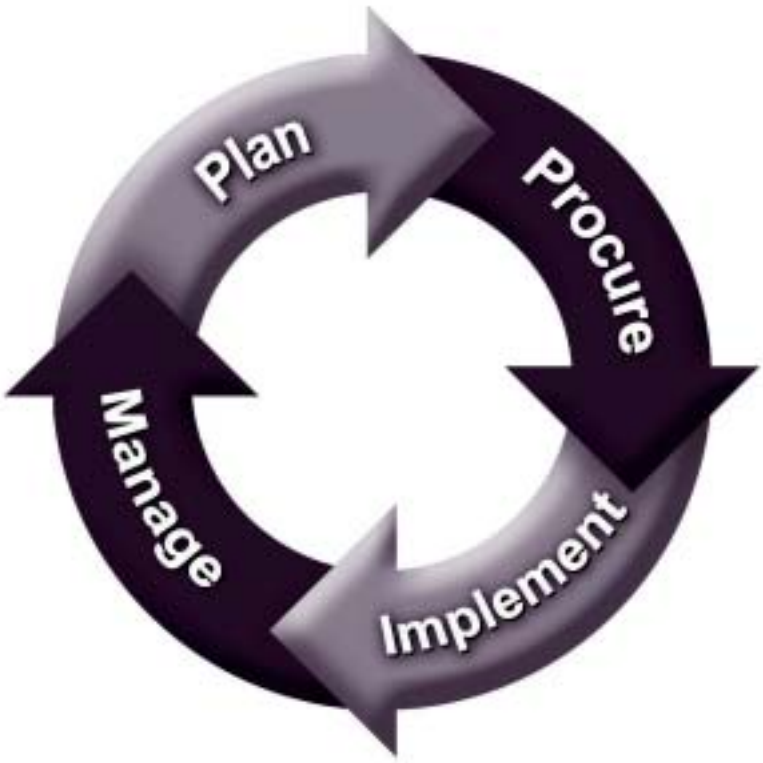
But buying a desk that perhaps isn't perfect won't affect how many criminals are apprehended and how quickly officers respond to an emergency. Information technology, on the other hand, often radically changes the way an agency does business — and it should! It can help officers better identify and deal with suspects, make dispatchers more effective, aid analysts in identifying crime patterns and detectives in solving cases. If chosen hastily, however, technology can jeopardize mission-critical law enforcement activities, and/or hamper users and management, so its potential benefits may never be realized.

Furthermore, because IT impacts mission-critical activities, its implementation causes major changes and most folks are reluctant when it comes to accepting change. So, while a desk may be criticized for not having enough writing space or drawers, these issues will not readily cause the department to throw the desk away and waste a great deal of taxpayer dollars. Dissatisfied users of an information system, on the other hand, can (and in numerous instances have) cause an information system's downfall and demise, despite large investments of time and money.

Fact #3

IT planning and implementation is not a one-time activity.

Read and repeat this sentence: "Technology planning, acquisition and implementation is not a one-time activity." The process is cyclical in nature (see graphic on page 14), following what is known as the **systems development lifecycle** (SDLC), a process with several stages, including planning, procurement, implementation and management. However, the successful implementation of a system does not signal the end of the planning process. Systems implementation really signals the *beginning* of a new phase of evaluating the recently adopted system and planning for systems maintenance, upgrade, enhancement and replacement.



■ **Systems Development Lifecycle**

With rapid advances in hardware and software, new system functionality is available almost immediately after a system is implemented. That is not to suggest an agency postpone acquisition in anticipation of the "latest" system. It only means that after a system is installed, the planning process continues to take new technology, functionality and capability into consideration. In addition, you'll find user expectations change quickly when new systems are implemented, and the demands placed on the systems escalate.

Also, new State and Federal laws will continue to require automation from law enforcement agencies. Budgets must reflect this commitment to SDLC. Funding agencies must be convinced to apply **lifecycle costing** methods when allocating funds to account for downstream expenses associated with operation, maintenance, training and coordination of change. **Remember that one-time grants will not fund a lifetime of technology support and replacement.**

Fact #4

IT must support the strategic business mission, goals and objectives of the law enforcement agency.

Information technology can be an effective tool for any business to meet its overall strategic objectives. But first, those business objectives must be outlined in a strategic plan. Then, information systems can be designed that meet those strategic business objectives.

Like any business, a law enforcement agency should first prepare a strategic business plan that articulates the organization's overall mission, goals and objectives. From this strategic business plan, an agency can develop a strategic vision for information technology and its role in the agency. The strategic IT vision directly supports the mission, goals and objectives of the agency.

This means the Chief/Sheriff must:

1) *Have a **strategic business plan** in place that articulates the organization's mission, goals and objectives;*
2) *Recognize the mission-critical role of IT in policing;*
3) *Create a systematic process for continual planning, maintenance and support of information systems; and*
4) *Develop a **strategic IT vision document**.*

■ **Strategic Business Plan Drives Agency IT Vision**

"If an agency's business mission is vague or not clearly understood, the IT projects developed are much less likely to successfully support the strategic goals of the organization."

— **Maj. Piper Charles**
Charlotte-Mecklenburg (NC) Police Department

A strategic IT vision will articulate how technology will assist the agency in meeting its core business mission and establish an ongoing process to evaluate, upgrade and enhance those technologies as business goals and technology change. Agencies meet this broad strategic IT vision through a series of individual **projects** that build the IT capabilities of the agency, as illustrated on page 15.

This level of planning and coordination is essential for the various individual projects to come together, integrate properly and collectively support the agency's goals.

INFORMATION TECHNOLOGY AND ITS ROLE IN THE METROPOLITAN POLICE DEPARTMENT, WASHINGTON, DC (MPDC)

"Information technology…makes it easier for the MPDC to share information with the community quickly and effectively. As such, new information technology is a critical part of the MPDC's evolving strategy of community policing and crime prevention."

"Technology does not drive itself; it is not created for its own purpose. New technology must be reflective of, and advance, the new strategy of the Department."

From *Information Technology and the MPDC: Moving Into the Next Century*

Fact #5

Successful projects require strong project management.

A successful project is one that is **completed on time and within budget, and meets user needs and expectations**. That's a tall order. That's where **project management** comes in.

What is project management and why is it so important?
The Project Management Institute (**www.pmi.org**) gives us a definition of project management in its publication *A Guide to the Project Management Body of Knowledge* (PMBOK®): "The application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands among:

- Scope, time, cost and quality.
- Stakeholders with differing needs and expectations.
- Identified requirement (needs) and unidentified requirements (expectations)."

Quality project management is critical to ensuring a successful project.

Fact #6

All projects require a plan.

Successfully automated and integrated information system projects are preceded and accompanied by continual, comprehensive and strategic planning, which allows system stakeholders to develop a roadmap for the future.

A good plan determines the range of user needs, identifies automation priorities and considers technology and data standards. It focuses on the human and funding resources required to support these systems. It embraces the systems development lifecycle. The plan addresses operational systems specifications, hardware and software standards, existing systems and the environment in which the automated system will work. Planning ensures that *all* users have their needs addressed by the system. Planning also includes a complete business process review to find better, more effective and more efficient ways of doing business. It contemplates future needs of the agency and users, scheduled upgrades and replacements.

A **project** is a temporary endeavor undertaken to create a unique product or service. 'Temporary' means that every project has a definite beginning and a definite end. 'Unique' means that the product or service is different in some distinguishing way from all similar projects or services.
— PMBOK®

Fact #7

Successful IT implementation can happen!

Now that we've scared you into returning to the pen and paper, let us also tell you that IT initiatives can and have been successful. But they are successful because project leaders and team members followed best practices for planning and managing the projects from idea to inception, such as clearly defining the project; getting the right people involved; setting realistic goals, objectives and timelines; developing a thorough project plan; accurately and honestly assessing risk; properly negotiating contracts; developing structured implementation and training plans; and establishing benchmarks and performance metrics for assessing and evaluating the project's success.

And that is what this Guide is intended to do — walk you through the process of properly planning and implementing an IT initiative. It will focus specifically on how to tackle individual technology projects within a law enforcement agency. It's a Guide that the Chief/Sheriff, Project Manager, end user or technologist can pick up the minute the phrase is uttered "let's get a new _____"(enter the information technology of your choice in the space provided).

So read on! The rest of this Guide will tell you step by step how to prepare and execute a plan for your technology project. Good luck!